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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/776,522

Applicant(s)

MAKUTA, YOHEI

Examiner

BRUK A. GEBREMICAHEL

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 13 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13 and 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-845)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following office action is a **Final Office Action** in response to communications received on 10/08/2010.

Currently, claims 1, 5, 1-22 have been amended; claims 11 and 14-16 have been canceled. Therefore, claims 1-10, 12-13 and 17-22 are pending in this application.

Even though the Examiner indicated in the last interview (Interview summary 10/13/2010) that Applicant's amendment overcomes the current rejection, further review of the claims revealed that the current claims are still unpatentable over the prior art of record. Please, see *Claim Rejections - 35 USC § 103* section below for detail.

Response to Amendment

2. Applicant's amendment to claim 17 is sufficient to overcome the 35 U.S.C. 112, second paragraph rejection set forth in the previous office action. Accordingly, the Examiner withdraws the rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- Claims 18 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 18 and 19 recite the limitation, "a cross pipe bridging between forward ends of the sub-frames". Applicant's disclosure, as originally filed, does not describe the structure bridging between the forward ends of the sub-frames (i.e. FIG 1, label 56) as a pipe; rather, the original disclosure describes this structure as a frame ("cross frame"). Note that a pipe can be a frame since a frame can be a hollow or solid structure; however, a frame is not always a pipe since a pipe always has a hollow feature (e.g. a tube).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1,3-6, 8-10, 12-13 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605.

Regarding claim 1, Caprai discloses the following claimed limitations, a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (col.1, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display not labeled), wherein the video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism capable of

being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16).

Caprai further implicitly discloses, the body for rotatably securing the steering handle mechanism comprising a pair of left and right main frames (see FIG 2, label 28), a centrally located main frame (FIG 2, label 22).

Caprai does not explicitly disclose, a pair of sub-frames connected to roughly central portions of the left and right main frames so as to extend from the left and right main frames in a direction away from the operator of the simulation system, the control unit being mounted in a position between downwardly sloping linear portions of the pair of left and right main frames and under centrally located main frame; lateral sides of the control unit having lengths which are parallel to the downwardly sloping linear portions; the position of the control unit being such that most of the control unit extends below where the sub-frames are connected to the downwardly sloping linear portions of left and right main frames, the position of the control unit being rearward with respect to each of the sub-frames.

However, Ritchie teaches, a pair of left and right main frames, a centrally located main frame, a pair of sub-frames connected to roughly central portions of the left and right main frames (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, label Pair of sub-frames), and a control unit for the system being mounted in a position between downwardly sloping linear portions of the pair of left and right main frames and under the centrally located main frame (see FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation); lateral sides of the control unit

having lengths which are parallel to the downwardly sloping linear portions (see FIG A, label 3, see sides of the control unit are parallel to the "Right main frame" and the "Left main frame").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie into Caprai's system in order to provide a more realistic riding experience to the user (as taught by Ritchie.), so that the user would feel as if he/she is riding an actual bike.

With regard to the recited feature, "the pair of sub-frames extending in a direction away from the operator of the simulation system", according to Applicant's specification, the function of the frames is to attach the simulation system to a flat-surface table (see Para.0035, Para.0049 and Para.0051 of Applicant's disclosure). The prior art (e.g. Caprai) also discloses that the structural features taught in the reference (e.g. FIG 2, labels 22 and 28) are employed to secure the simulation system on a table (see col.3, lines 45-50).

Therefore, it would have been an obvious matter of design choice as to the frame used for securing the simulation system, wherein no stated problem is solved or unexpected result is obtained by prescribing a pair of sub-frames extending in a direction away from the operator.

Caprai in view of Ritchie does not explicitly teach, "the position of the control unit being such that most of the control unit extends below where the sub-frames are

connected to the downwardly sloping linear portions of left and right main frames, the position of the control unit being rearward with respect to each of the sub-frames".

However, the criticality or functional limitation disclosed in Applicant's original disclosure regarding the position of the control unit (the control unit is disposed between the right and left main frames) is to prevent the overall size of the simulation system from increasing in the height direction, so that it does not restrict the field of view of the operator (e.g. see Para.0057 and Para.0058 of Applicant's original disclosure).

It is also very apparent from the teaching of the prior art that the control unit (e.g. see Ritchie, FIG 1, label 3) is positioned between the left and right main frames, and under the centrally located main frame (see FIG A below regarding the frames identified by the Examiner) in such a way that it does not restrict the field of vision of the operator.

Therefore, the system of the prior art appears to work well for the intended purpose.

Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses,

Regarding claim 3, a clutch lever and a brake lever (FIG 3, labels 72 and 76),

Regarding claim 4, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses,

Regarding claim 6, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56) and includes a throttle grip for an accelerating operation of the motorcycle displayed on the display (FIG 3, label 68 and col.6, lines 65-67),

Regarding claim 8, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67),

Regarding claim 9, the display being a display for a personal computer (col.3, lines 17-20),

Regarding claim 10, a casing being formed in a substantially box shape (FIG 1, label 14).

Caprai does not explicitly disclose, a circuit substrate being disposed in an interior of the casing of the control unit, and a plurality of connection cables being connected to the circuit substrate through connectors.

However, Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

Regarding claim 17, Caprai discloses the following claimed limitations: a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (col.3, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display not labeled), wherein said video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism including a steering stem, and an elongate steering handle capable of being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16), a control unit for said system (FIG 1, label 14).

Caprai further implicitly discloses, the body comprising a pair of left and right main frames (FIG 2, label 28), a centrally located main frame (see FIG 2, label 22).

Caprai does not explicitly disclose, the pair of left and right main frames each of which includes a downwardly sloping linear portion, a horizontal linear portion extending from a lower end of the downwardly sloping linear portion in a direction away from the operator of the simulation system, and a stopper mechanism having a fixing bolt provided at a forward end of the horizontal portion; a pair of left and right sub-frames each of which is connected to a roughly central part of the corresponding downwardly sloping linear portion in a position that is directly above the corresponding horizontal linear portion and extending in a direction that is away from the operator of the apparatus that is substantially parallel to the corresponding horizontal linear portion; the control unit being mounted in a position directly between the downwardly sloping linear

portions and having lateral sides having lengths which are parallel to the downwardly slopping linear portions, the position of the control unit being rearward with respect to each of the sub-frames, and rearward with respect to the fixing bolts at the forward ends of the horizontal linear portions.

As already indicated above, Caprai does not explicitly disclose, "a stopper mechanism having a fixing bolt provided at a forward end of the horizontal linear portion".

However, the functional limitation of the stopper mechanism according to Applicant's original disclosure is to fix the frame body to a flat-surfaced table or the like (e.g. see Para.0035 of Applicant's original disclosure).

The prior art also describes that Caprai's system implements a clamping mechanism which is utilized to fix the frame body of the simulator on a table (e.g. see Caprai's system as depicted in FIG 2, label 26).

Applicant has not disclosed in the original disclosure any importance as to why this stopper mechanism is critical to the current invention (or solves any stated problem) when compared to the prior art system, except for fixing the frame body to a flat-surfaced table.

Therefore, one of ordinary skill in the art (at the time of the invention was made) would readily recognize the fact from the teaching of the prior art that any suitable fastening mechanism would be implemented to securely attach the simulator on a table in order to prevent the simulator system from slipping (sliding) during training; and thus, the system of the prior art appears to work well for the intended purpose.

However, Ritchie teaches, the pair of left and right main frames each of which includes a downward sloping linear portion (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, labeled "Left main frame and Right main frame", each having a downward sloping linear portion), a horizontal linear portion extending from a lower end of the downward sloping linear portion in a direction away from the operator of the simulation system (see Examiner's annotated figure, FIG A, labeled "Horizontal Linear portion"), a pair of left and right sub-frames each of which is connected to a roughly central part of the corresponding downwardly sloping linear portion in a position that is directly above the corresponding horizontal linear portion and extending in a direction that is away from the operator of the apparatus that is substantially parallel to the corresponding horizontal linear portion (see Examiner's annotated figure, FIG A, labeled "Pair of sub-frames"), the control unit being mounted in a position directly between the downwardly sloping linear portions and having lateral sides having lengths which are parallel to the downwardly sloping linear portions (see FIG 1, label 3, see back section of control unit).

Ritchie further implicitly teaches the limitation, *the position of the control unit being rearward with respect to each of the sub-frames, and rearward with respect to the fixing bolts at the forward ends of the horizontal linear portions*" (FIG 1, label 3, see back section of control unit where the control box is connected to the sub-frames)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by

incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

Note that regarding the limitation, "the fixing bolts at the forward ends of the horizontal linear portions", the functional limitation with regard to the fixing bolts is to securely attach the control units on the main frames (e.g. see FIG 3 of Applicant's original disclosure).

The reference also indicates that the control unit of Caprai's system is securely attached between the main frames (see FIG 1, label 3).

Therefore, here also one of ordinary skill in the art (at the time of the invention was made) would readily recognize the fact from the teaching of the prior art that any suitable attachment means (such as bolt, riveting or welding) would be implemented in order to securely attach the control unit between the frames, in order to keep the unit stable during operation of the simulator so that the control unit does not fall out of the frame.

Furthermore, regarding the limitation, "the position of the control unit being rearward with respect to each of the sub-frames and rearward with respect to the fixing bolts", as already discussed with respect to claim 1 above, the criticality or functional limitation disclosed in Applicant's original disclosure regarding the position of the control unit (the control unit is disposed between the right and left main frames) is to prevent the overall size of the simulation system from increasing in the height direction, so that it does not restrict the field of view of the operator (e.g. see Para.0057 and Para.0058 of Applicant's original disclosure).

It is also very apparent from the teaching of the prior art that the control unit (e.g. see Ritchie, FIG 1, label 3) is positioned between the left and right main frames, and under the centrally located main frame (see FIG A below regarding the frames identified by the Examiner) in such a way that it does not restrict the field of vision of the operator.

Therefore, the system of the prior art appears to work well for the intended purpose.

Regarding claims 5 and 22, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, said riding simulation apparatus is adapted to be mounted on an elevated mounting surface (FIG 1, table not labeled).

Ritchie further teaches, the control unit is mounted such that the lengths of the lateral sides of the control unit are parallel to the downwardly sloping linear portions (FIG A, label 3, see sides of the control unit are parallel to the "Right main frame" and the "Left main frame").

Regarding the recited feature, "the control unit is mounted completely away from an upper side of the elevated mounting surface", this appears to be a mere rearrangement of part. It has been held that a mere rearrangement of a part(s) that does not change or affect the principle of operation of the device does not patentably distinguish one invention from another. For instance, in re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art **except** with regard to **the position of the starting switch** were held unpatentable because **shifting the position** of the starting switch **would not have modified the**

operation of the device.); In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice).

As already discussed above with respect to claim 1, the criticality or functional limitation disclosed regarding the claimed position of the control unit is to prevent the overall size of the simulation system from increasing in the height direction, so that it does not restrict the field of view of the operator (e.g. see Para.0057 and Para.0058 of Applicant's original disclosure).

It is also very apparent from the teaching of the prior art that the control unit described in the references (e.g. Caprai, FIG 1, label 12 and Ritchie, FIG 1, label 3) is positioned in such a way that the field of view of the operator is not restricted. Therefore, the system of the prior art appears to work well for the intended purpose.

Regarding claims 12 and 13, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Ritchie further teaches, the casing of the control unit is disposed between a first main frame and a second main frame (see FIG A below with the Examiner's interpretation),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Caprai in view of Ritchie by placing the control unit between a pair of main frames in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (see col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Furthermore, providing plurality of flange portions on a given unit in order to attach the unit to a supporting member is an obvious and well-known expedient at the time of the claimed invention was made.

Caprai in view of Ritchie does not explicitly teach, a space is provided between left and right sides of the casing and the corresponding linear portion of the left and right main frames.

However, the above feature does not change or affect the principle of operation of the control unit, which is to perform data processing operation on the received data signals and send output to the display reflecting the operation of the simulator (e.g. see Para.0055 and Para.0056 of Applicant's original disclosure). Moreover, Applicant's disclosure (as originally filed) does not disclose any importance as to why this feature (e.g. providing space between left and right sides of the casing and the corresponding left and right main frames) is critical to the current invention (or solves any stated problem).

Therefore, this does not patentably distinguish the current invention from the prior art, as the system of the prior art appears to work well for the intended purpose.

Regarding claims 18 and 19, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the end of the centrally located main frame disposed farthest away from the operator (FIG 2, label 22).

Ritchie further teaches, the end of the centrally located main frame is connected to a cross frame bridging between tip end portions of the sub-frames (see FIG A, the

section i.e. wall of the control unit where the end of the pair of sub- frames and end of the central frame are connected).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by linking the end of the steering stem to the sub-frames in order to achieve an optimum force distribution so that the simulation system would be more stable.

Note that regarding the limitation, *wherein a forward-most face of the control unit, which is located rearwardly and separately of the cross frame/pipe, faces a rear side of the cross frame/pipe*, as already discussed above, such rearrangement of the control unit does not affect or change the principle of operation of the device (which is to perform data processing operation on the received data signals and send output to the display reflecting the operation of the simulator (e.g. see Para.0055 and Para.0056 of Applicant's original disclosure).

Thus, the mere rearrangement of the position of the control unit (i.e. positioning it rearwardly and separately of the cross frame/pipe) does not change or affect the principle of operation of the device. Therefore, a mere rearrangement of the location of the control unit does not PATENTABLY distinguish the current invention from the prior art.

Note that as already discussed above repeatedly, the criticality regarding the location of the control unit is to prevent the field of view of the operator from being restricted (e.g. see Para.0058 of Applicant's original disclosure). It is also apparent from the teaching of the prior art, the control unit (see Ritchie, FIG 1, label 3) is positioned in

such a way that it does not restrict the field of view or vision of the operator. Therefore, the system of the prior art appears to work well for the intended purpose.

Caprai in view of Ritchie teaches the claimed limitations as discussed above.
Caprai further discloses,

Regarding claims 20 and 21, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Ritchie further teaches, when the riding simulation system is viewed in a side elevation view, the left and right downwardly sloping linear portions can be seen to overlap the lengths of the left and right lateral sides of the control unit (see FIG A below along the "Left main frame" or along the "Right main frame" where the edges of the control unit are in parallel to the main frames).

In addition, the above recited limitation appears to be merely a position information or point of reference of a given part (i.e. point of reference of the control unit) when viewed at a particular side or angle; and therefore, this also does not patentably distinguish the current invention from the prior art since it does not change or affect the principle of operation of the claimed device.

- Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605 and further in view of Pittarelli 3,964,564.

Regarding claim 2, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the steering handle mechanism further comprising a steering stem having a generally fan-shaped upper portion (FIG 3, label 42), an

elongate steering handle that is integrally held on the steering stem through a holder (FIG 3, labels 56 and 54), the steering handle mechanism further comprising one of a clutch lever (FIG 3, label 76) and a brake lever (FIG 3, label 72) are held on the steering handle, and left and right grips which are mounted respectively to end portions of the steering handle (FIG 3, label 60).

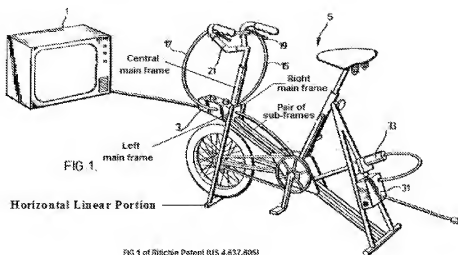
Caprai in view of Ritchie does not explicitly teach, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle.

However, Pittarelli teaches, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle (see FIG 1 labels 141, 142, 144 and col. 6, lines 53-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by using clamps in order to construct the joint portions in a way that the operating levers would be swingable on the handlebar as taught by Pittarelli.

Regarding claim 7, Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above.

Caprai further discloses, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67).



Response to Arguments.

5. Applicant's arguments filed on 10/08/2010 have been fully considered but they are not persuasive. In the remarks, Applicant argues that,

(1) While not conceding the appropriateness of the Examiner's rejections, but merely to advance the prosecution of the present application, independent claim 1 (and independent claim 17) has been amended to recite a combination of elements directed to a riding simulation system . . .

As conceded by the Examiner, Caprai fails to disclose sub-frames. Regarding the Ritchie reference, as can be seen in the Examiner's annotated FIG. 1, a major portion of control box 3 is located above and forward of the pair of pipes which the Examiner's refers to as "pair of sub-frames," and this pair of pipes slopes downwardly toward the rider from the rear side the control box. Thus, Ritchie cannot make up for the deficiency of Caprai to reject independent claims 1 and 17 . . .

- In response to argument (1), the Examiner respectfully disagrees. As already

discussed in the previous action, the criticality with regard to the position of the control unit (i.e. placing the control unit between the first and second main frames) is to prevent the operator's field of vision from being restricted (e.g. see Para.0057 and Para.0058 of Applicant's disclosure). The control unit of the prior art system is also positioned between a left and right main frames of the system in such a way that the field of vision of the operator is not restricted (e.g. see Ritchie FIG 1, label 3 OR FIG A above). It is clear from this brief analysis that the system of the prior art meets the functional limitation (the criticality) of Applicant's claimed feature; and therefore, the system of the prior art appears to work well for the intended purpose.

In addition, the claimed position of the control unit does not affect or change the principle of operation of the control unit (e.g. Para.0055-Para.0056 of Applicant's disclosure). Thus, the current limitation, "*most of the control unit extends below where the sub-frames are connected to the downwardly sloping linear portions of left and right main frames, the position of the control unit being rearward with respect to each of the sub-frames*", appears to be a mere arrangement of parts that does not change or affect the principle of operation of the claimed system. For instance in re Japikse, 181 F.2d 1019, 86 LISPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art except with regard to the position of the starting switch were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device.); In re Kuhle, 526 F.2d 553, 188 LISPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice).

Therefore, such a mere arrangement of parts does not patentably distinguish the current invention from the prior art.

(2) All dependent claims are in condition for allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein. For example, each of dependent claims 5 and 22 recites "wherein said riding simulation apparatus is adapted to be mounted on an elevated mounting surface . . . Caprai merely discloses a control unit mounted on the upper side of table 18. Ritchie merely discloses a control box 3 having lateral sides with lengths extending forward from the front fork. Thus, dependent claims 5 and 22 contain allowable subject matter.

As other examples, each of dependent claims 18 and 19 recites "a forward end of the centrally located main frame disposed farthest away from the operator is connected to a cross pipe bridging between forward ends of the sub-frames, . . . Neither Caprai nor Ritchie teaches a cross pipe. As for Ritchie, the forward-most front face of video game (control unit) 3 certainly does not face a rear side of any part of the exercise bike 5 . . .

- In response to argument (2), the Examiner respectfully disagrees. With regard to claims 5 and 22, the above argument appears to be directed to the position of the control unit with respect to the left and right main frames. As already indicated in the above section (see *response to argument (1)*), a mere rearrangement of a part(s) that does not change or affect the principle of operation of the device is not relied upon to patentably distinguish the current invention from the prior art.

The control unit of the current invention is placed between the first and second main frames in order to prevent the operator's field of vision from being restricted (e.g. see Para.0057 and Para.0058 of Applicant's disclosure). The control unit of the prior art

system, e.g. see Caprai Fig 1, label 12, is also positioned in such a way that the field of vision of the operator is not restricted. Similarly, in the case of Ritchie (e.g. see Fig 1, label 3), the control unit is positioned between a left and right main frames of the system in such a way that the field of vision of the operator is not restricted (e.g. see Ritchie FIG 1, label 3 OR FIG A above).

Therefore, the Examiner concludes that Applicant's currently presented claimed features have already been taught or suggested by the prior art.

With regard to claims 18 and 19, it is very apparent from the system of Ritchie that the centrally located main frame (see FIG A above) is attached to the back section of control unit box where the forward ends of the sub-frames are connected. Therefore, at least from the drawings, it is clear that the prior art of record does teach or suggest Applicant's currently presented claimed features.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this final office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI XUAN can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruk A Gebremichael/
Examiner, Art Unit 3715

/XUAN M. THAI/
Supervisory Patent Examiner, Art Unit 3715